2007-10 Business Plan

learn & imagine

Alberta

Advanced Education and Technology

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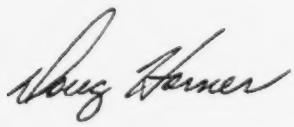
Accountability Statement

The business plan for the three years commencing April 1, 2007 was prepared under my direction in accordance with the *Government Accountability Act* and the government's accounting policies. All of the government's policy decisions as of March 26, 2007 with material economic or fiscal implications of which I am aware have been considered in preparing the business plan.

The Ministry's priorities outlined in the business plan were developed in the context of the government's business and fiscal plans. I am committed to achieving the planned results laid out in this business plan.



Doug Horner, *Minister of Advanced Education and Technology*
March 30, 2007

The Ministry

The Ministry of Advanced Education and Technology consists of the following entities for budget purposes: Department of Advanced Education and Technology, the Access to the Future Fund, Alberta Research Council Inc. and iCORE Inc. (Alberta Informatics Circle of Research Excellence).

The Minister is also responsible for the Alberta Science and Research Authority and its associated institutes including: Alberta Life Sciences Institute, Alberta Agricultural Research Institute, Alberta Forestry Research Institute, Alberta Energy Research Institute and Alberta Information and Communications Technology Institute. The Minister also has responsibility for legislation pertaining to the Alberta Heritage Foundation for Medical Research and the Alberta Heritage Foundation for Science and Engineering Research (operating under the trade name "Alberta Ingenuity").

In addition, the following councils and boards provide policies, guidelines and advice to the Minister: the Alberta Council on Admissions and Transfer, the Alberta Apprenticeship and Industry Training Board, the Campus Alberta Quality Council, the Students Finance Board and the Access Advisory Council.

The department's organizational structure has been aligned to support directions determined through the *A Learning Alberta* consultation process as well as the pursuit of Alberta's innovation agenda, and as a result of the merger of the former ministries of Advanced Education and Innovation and Science. The Ministry's 2007-10 Business Plan identifies how it plans to work over the next three years to enhance advanced learning opportunities and innovation for all Albertans.

Alberta's advanced learning system comprises public board-governed institutions, the apprenticeship and industry training system, community consortia, private providers and community-based organizations. In collaboration with the advanced learning system, industry, communities, government agencies and non-governmental organizations, Advanced Education and Technology strives to create accessible, affordable and quality learning opportunities that are responsive to the ongoing learning needs of Albertans.

Alberta's innovation system, which includes government working collaboratively with industry and academia, strives to create, develop and implement innovation policies, practices and programs that are critical for Alberta if it is to sustain and enhance current levels of prosperity and a high quality of life over the longer term. A highly skilled and qualified work force and the innovative development and application of science and technology are essential for the creation, growth, sustenance and retention of globally competitive research-intensive companies. The Ministry cooperates with key innovation support agencies to foster support for commercialization and innovation activities across the province.

Advanced Education and Technology's vision, mission and principles define the Ministry and support the Government of Alberta's vision to build a vibrant and prosperous province where Albertans enjoy a superior quality of life and are confident about the future for themselves and their children.

Advanced Education and Technology's vision is its view of the future. The Ministry's mission describes its purpose and reason for existence; the principles identify the Ministry's method of operating.

Vision

Alberta leads the world in inspiring and supporting lifelong learning for all its peoples, and prospers through innovation.

Mission

Advanced Education and Technology's mission is to assist Alberta to be a learning and innovative society.

Skilled and highly qualified people are key elements in a successful economy. Providing all Albertans with affordable access to high quality learning opportunities will ensure that Albertans possess the skills to succeed in their chosen professions. Only then can Alberta fulfill its hope of being a province where the generation of ideas is met by an environment that has the means to commercialize new products and services, creating a prosperous and sustainable future for all Albertans.

Principles

Accessibility

Anyone who wants to pursue advanced learning in Alberta should be able to do so.

Affordability

Education must be affordable if it is to be an accessible lifelong pursuit for Albertans.

Diversity

Alberta's advanced learning and innovation system must respect a rich diversity of communities, cultures, traditions, learner aspirations and abilities.

Collaboration and Alignment

A resilient, responsive and adaptable learning system, as well as Alberta's ability to capture value through innovation, must be built on a strong foundation of partnerships, coalitions and networks so that efforts are aligned with desired outcomes.

Global Excellence and Competitiveness

Alberta's advanced learning system's research, technology and knowledge transfer capacities and capabilities must be world class for Alberta to achieve excellence and be globally competitive. They must meet the needs of learners, enable Alberta to attract and retain highly-qualified students and personnel and foster company creation, growth and attraction.

Sustainability

Alberta's advanced learning system and innovation framework must focus on sustainability of its investments to ensure the province's long-term success in a knowledge-based global economy.

Link to the Government of Alberta Strategic Business Plan

The Government of Alberta Strategic Business Plan addresses significant opportunities and challenges facing Alberta over the next three years and positions Alberta to make the most of its economic, social and natural advantages. It is a plan to strategically manage growth and plan for a sustainable and secure future. Advanced Education and Technology ensures that its goals, strategic priorities, outcomes and strategies support Goal One of the Government of Alberta Strategic Business Plan, which states: "Alberta will have a prosperous economy"; and Goal Two, which states: "Albertans will be well prepared for lifelong learning." The strategic priorities, goals, outcomes and strategies also support the government's priority to Build a Stronger Alberta.

The following summarizes the priority linkages between the Government of Alberta 3-year business plan and the Ministry business plan:

Government of Alberta Strategic Business Plan

Goal 1 Alberta will have a prosperous economy

Goal 2 Albertans will be well prepared for lifelong learning

Government Priority - Build a Stronger Alberta

- Build on initiatives to increase access, affordability and quality in post-secondary education
- Economic diversification through research and technology commercialization

Significant Opportunities and Challenges

The key to future prosperity, economic growth and healthy communities is a robust innovation-based research-intensive economy, driven by Albertans with a desire to learn and innovate throughout their lives. There is growing recognition that an affordable, accessible, high quality advanced learning system, and an innovative economy with thriving knowledge transfer and commercialization capabilities are key to facilitating and securing social prosperity, economic success and a knowledgeable and healthy citizenry. The following opportunities and challenges are considered significant in that they could impact the Ministry's ability to implement strategies and achieve its goals:

Long-term Economic Growth

Alberta is faced with unprecedented economic growth and prosperity, creating tremendous opportunities for Albertans because of abundant employment opportunities. In order to sustain this growth Alberta must address challenges as they pertain to the learning and innovation system:

- Abundant employment opportunities have enticed many Albertans to enter the labour force rather than pursue further education. While acquiring the skills to address the immediate needs of the labour market, Albertans must develop the skills and competencies required to meet the needs and opportunities of the future.
- Strong and sustained economic growth has led to significant in-migration. Helping new Albertans and their families integrate successfully into the advanced learning system, labour force and society will allow them to reach their full potential while at the same time helping to address the needs of a growing economy.

Capturing Value through Innovation

Alberta is a player in an intensely competitive global economy. The Government of Alberta has put a clear emphasis on developing its technology commercialization capacity and capabilities as well as the value-added sectors of its economy. To do so, Alberta will need to address the following challenges:

- Advance its research and innovation capacity by investing and leveraging external investments in the priority sectors of energy, life sciences, information and communications technologies and nanotechnology. This will lead to commercial applications and increase the value of Alberta's resources, creating opportunities and environmental benefits.
- Encourage greater industry investment in research, technology and innovation through a competitive tax, fiscal and regulatory environment that engages industry and other stakeholders to play a critical role in the innovation system by taking new ideas and turning them into new products, processes and services in the global marketplace.
- Ensure appropriate infrastructure is in place to support applied research and successful demonstration and commercialization of new products and services, thereby providing a major catalyst for Alberta's continued economic prosperity.
- Find key niches in critical areas of the economy, and nurture these strengths so Alberta can compete within a global context. Alberta companies must increase the level and effectiveness of their business and marketing skills. In order to finance and commercialize new technologies, businesses need access to early stage capital, and government needs to encourage and align programs in order to build on sustainable strengths and nurture centres of excellence in commercialization.
- Recognize that research, discovery, and transformation of new knowledge are essential to Alberta's economic prosperity. The advanced learning system, as well as the business environment, must play a key role in attracting, developing and retaining skilled and highly qualified people who are the key to realizing the province's innovation capabilities and capacity. At the same time, Alberta must support learning in the arts and humanities to foster all the aspects of creativity that drive truly innovative societies.

Accessibility for all Learners

Alberta has created a quality advanced learning system. Learning providers not only provide a range of quality educational programming, but also are involved in leading-edge research. Challenges to be addressed are:

- Alberta post-secondary participation rates are among the lowest in Canada, with the exception of apprenticeship training. Albertans should be encouraged to participate at all levels in advanced learning.
- Opportunities need to be provided to enable higher levels of participation among under-represented groups, including Aboriginal, rural, and low-income Albertans.
- Many Albertans lack the foundational skills, such as literacy and numeracy, required for success in advanced learning.
- Government has released an Affordability Framework, with the objective of enhancing the affordability of advanced learning to increase access and participation. Addressing aspects of the Affordability Framework will be important to ensure affordability for all learners.
- Alberta's advanced learning system will need to have strong and responsive knowledge networks to allow learners, communities and employers to work collaboratively to develop the knowledge and skills required now and in the future.
- The advanced learning system must improve the supply of quality information to Albertans regarding career, education and training opportunities as well as resources and tools available to support career and educational decisions.

Building Community Capacity through Collaboration

Alberta has the opportunity to build a world-class advanced learning system and knowledge-based economy supported through leading edge innovation. Challenges in achieving these ends include:

- Leading edge research, technology and innovation will need to involve increased collaboration between diverse stakeholders, including educational institutions, industry and research organizations.
- Ensuring higher levels of educational attainment and enabling all Albertans to reach their full potential within their communities requires the development of a more inclusive and innovative advanced learning system. The learning system will increasingly need to engage communities and employers in the important journey of advanced learning. Increased collaboration between employers, learning providers and community organizations will be required to allow Albertans to readily move between work and learning.
- Building strong community capacity will require collaboration with stakeholders and partners including schools, community-based educators, post-secondary institutions, literacy groups, students, Aboriginal educators and leaders, business, industry and labour, immigrant and disabled communities and other under-represented groups. This collaboration will focus on expanded and locally-relevant regional access through increased collaboration with high schools to deliver post-secondary courses, greater use of distributed learning using technology such as Alberta SuperNet, alternative delivery formats such as increased work-site training and the expansion of degree granting capacity in the colleges.

Strategic Investment in Advanced Learning and Innovation

The Government of Alberta has made significant investments in the learning system and in support of research, technology development and innovation, and has put a priority on developing its technology commercialization capacity and the value-added sectors of the economy. To appropriately leverage existing investments and to further develop technology commercialization capabilities, the following challenges will need to be addressed:

- Ensuring the Access to the Future Fund, Alberta Heritage Scholarship Fund, Alberta Heritage Foundation for Medical Research and Alberta Ingenuity continue to play a key role in Alberta's advanced learning system as they are vital elements in achieving Alberta's advanced learning and research strategic priorities.
- Ensuring Alberta's advanced learning system provides affordable learning opportunities, increased access to those opportunities, seamless transitions throughout the system, more research support and the flexibility learners need to pursue their career aspirations. To do this, Alberta will need to build on the high quality advanced learning foundation we currently have with strategic investments in needs-based student assistance and debt-repayment mechanisms, human resources, facilities, equipment, technology and other supports.
- The Alberta Science and Research Authority and its institutes will continue to strengthen their contribution to science, research, technology and commercialization in key areas: energy, life sciences, information and communications technology and nanotechnology to ensure the sustainable prosperity and quality of life of all Albertans.

Strategic Priorities 2007-10

The strategic priorities described below have been identified through the ministry's review of environmental factors.

Government Priority - Build a Stronger Alberta

Build on Initiatives to Increase Access, Affordability and Quality in Post-Secondary Education

Linkage: Goals 1, 2 & 3

Access to Advanced Learning Opportunities / Enrolment Planning

People are the key to Alberta's future prosperity. The success of adult learners depends upon their ability to make smooth transitions to, within and from the advanced learning system. Enhancing these transitions, along with increasing access to learning opportunities, will help Albertans achieve success in the advanced learning system and the labour market. Key activities will be to:

- Develop a framework defining roles and mandates of the public and private not-for-profit post-secondary institutions.
- Ensure strategies are in place to meet the Government's commitment to enrolment planning and increase post-secondary space availability.
- Ensure access of under-represented groups to advanced education opportunities along the learning continuum, from adult literacy and English as a Second Language programming to post-graduate studies.
- Collaborate with stakeholders to improve First Nations, Métis and Inuit learner success.
- Ensure high levels of awareness among students and their parents of advanced learning opportunities.
- Focus on expanded regional and community access through the strategic application of technology, expansion of degree granting capacity within the system, clarification of roles relative to communities and provision of the tools necessary to allow learners to succeed.
- Foster an advanced learning system that recognizes and values diversity to prepare learners for the global workplace.

Affordability

Ensuring that Albertans have access to learning opportunities requires that those opportunities be affordable to learners and their families. Specific activities to be undertaken include:

- Create responsive policies and programs to address the increasingly diverse needs of learners and leverage high rates of participation among all Albertans, including Aboriginal learners, rural Albertans, immigrants and those who are socio-economically disadvantaged.
- Implement elements of the Affordability Framework to assure inclusion of all learners and to ensure that financial need is not a barrier to learning.
- Continue to work with the federal government to ensure assistance levels support the cost of learning and that debt levels are manageable.

These are in addition to the important ongoing core activities of the ministry.

Quality in the Advanced Learning System / Access to the Future Fund

Maintaining the quality of advanced learning is a priority for Albertans. The quality of the advanced learning system underpins the ability of the system to meet the needs of learners, society and the economy. Specific activities will be to:

- Continue to stimulate private sector donations as well as support innovation and excellence within the advanced education system through the Access to the Future Fund.
- Continue to pursue the achievement of national and international standards of excellence, and be actively involved in cross-ministry, inter-provincial and international collaboration that will lead to increased standards of performance.
- Collaborate and cooperate, including community collaboration, to achieve a world-class advanced learning system and maximize the benefits to learners and society. Priorities for such collaboration will include literacy, Aboriginal education, system capacity and high standards of excellence in the delivery of degree program opportunities.
- Work towards a seamless advanced learning system so that Alberta learners move easily through a broad array of learning opportunities in a lifelong journey of learning. In a seamless advanced learning system, the entire spectrum of learning providers is collaborative and allows transitions throughout schools, community organizations, learning providers, employers and post-secondary institutions.

Increase Support for Community Education and Literacy Programs

Linkage: Goal 2

The ministry will focus on developing learning communities. A learner-centered society will seek to enable Albertans to acquire foundational skills for lifelong learning, and will equip communities to meet learner needs. Specific initiatives include the development of:

- A community-based education strategic framework.
- Policy options and programs to enhance adult literacy and support Aboriginal education.

Building and Educating Tomorrow's Workforce

Linkage: Goals 1 & 2

Alberta's economic strength depends on a knowledgeable citizenry and a highly skilled workforce. This requires a learning system that gives learners the opportunities and tools to succeed and excel. Advanced Education and Technology will continue to co-lead the Government of Alberta's comprehensive labour strategy, *Building and Educating Tomorrow's Workforce*. Specific priorities will be to:

- Enable the advanced learning system to meet the learning goals of Albertans.
- Inform, attract, develop and retain highly skilled workers to support a vibrant and growing economy.

Economic Diversification through Research and Technology Commercialization

Linkage: Goals 4 & 5

Developing, adopting and commercializing advanced technology are priorities for the Government of Alberta. Advanced Education and Technology will support innovation and knowledge development within the advanced learning system, research organizations and industry as well as provide support for centres of excellence and the transfer of research to commercial products. Some of the key initiatives include:

- Creation of a Value-Added and Technology Commercialization Task Force that will recommend a strategy to increase value-added economic activity and technology commercialization in Alberta.
- Ensure a business environment that is conducive to attracting, creating, growing, sustaining and retaining globally competitive, innovative and research-intensive companies.
- Increased business opportunities and improved quality of life through the application of new technologies to environmental, health care and educational challenges.
- Development, attraction and retention of highly skilled and qualified personnel to support a knowledge-based, research-intensive and value-added economy utilizing effective research organizations/industry interfaces.
- Build and sustain the research capacity of Alberta's innovation system through infrastructure programs, targeted program funding, attraction of other funding and the development of collaborative partnerships.
- Improvements in the capacity and capabilities of firms and institutions to engage in research and development activities in the strategic priority areas of energy, life sciences, information and communications technology and nanotechnology, to build the foundation for the commercialization of technologies.

Building Research and Innovation Capacity

Linkage: Goal 4

Alberta is in a highly competitive global race for outstanding research and innovations that can improve quality of life, foster new opportunities, enhance economic growth in the province, and increase our capacity, capabilities and knowledge in scientific fields in support of future discoveries. Key initiatives under this priority include:

- Continued focus on Alberta's key research priorities in energy, life sciences, information and communications technology and nanotechnology.
- Support advanced energy research and innovation that fosters research and industry development.
- Support life sciences research and innovation that fosters research and industry development through a focus on areas in bioproducts and biorefining, health, resource management, and agriculture and forestry.
- Support nanotechnology research and innovation that fosters research and industry development in strategic areas of energy and the environment, health and medical technologies, and agriculture and forestry.
- Support an information and communications technology strategy that fosters research and innovation development in strategic areas, focusing on our core competencies and creating sustainable infrastructure and industries.
- Support the water research strategy, focused on safe drinking water, efficient water use and healthy watersheds.

Core Businesses, Goals, Strategies and Performance Measures

Advanced Education and Technology has identified two core businesses, "A Learning Alberta" and "Innovation," that describe the ongoing key responsibilities of the Ministry. Under these core businesses are the goals with specific outcomes that describe the end results the Ministry wants to achieve in fulfilling its mission.

Advanced Education and Technology has identified strategies for 2007-10 that support the Ministry's goals and the government's business plan. Performance measures indicate the degree of success the Ministry has in achieving its goals and outcomes.

Core Business 1 A Learning Alberta

GOAL

1 A Learner-Centred System Accessible to all Albertans

What it means

Advanced Education and Technology strives to provide increased access to high quality advanced learning opportunities for all adult Albertans. It does this through policy, programming and funding support to post-secondary institutions and by working with industry to facilitate the development of training and certification standards in the apprenticeship and industry training system. It also strives to ensure that learner needs are met by seeking ways to make the system more learner-centred, accessible and affordable.

Outcomes

The following have been identified as Goal 1 outcomes:

- All Albertans, including Aboriginal and other under-represented groups, have opportunities to participate in the advanced learning system.
- Financial need is not a barrier to participating in the advanced learning system, and financial assistance is available to students to support a seamless system.
- Excellence is rewarded through scholarships and awards.
- Learners have information available to make informed decisions.
- Technology is effectively leveraged to support access and innovation in the advanced learning system.

Strategies

1.1 Implement the accessibility, affordability and quality requirements in the *Access to the Future Act*.

1.2 Develop innovative approaches to increase participation of Aboriginal, immigrant and other under-represented groups in learning opportunities.

1.3 Begin implementation of the Affordability Framework to ensure that financial need is not a barrier to participation in advanced learning opportunities.

1.4 Target scholarships, bursaries and grants to increase participation by under-represented Albertans.

1.5 Work with the federal government to develop a strategic response to the cessation of the Canada Millennium Scholarship Foundation.

1.6 Develop a coordinated framework on leveraging the use of technology and enhance learner access and entrance into the advanced learning system through the use of technology, innovation and collaboration with post-secondary institutions.

1.7 Develop innovative approaches to improve participation and achievement in apprenticeship and industry training in response to industry needs.

1.8 Enhance parents' and learners' knowledge and awareness of Alberta's advanced learning system and financial support options through a collaborative raising-awareness and mentorship campaign, and through other effective marketing efforts.

1.9 Promote science and technology awareness within Alberta, including encouraging youth to enter careers in science and technology.

1.10 Ensure scholarship programs are maximizing recognition of the achievement of excellence that occurs throughout the learning process.

1.11 Increase enrolment capacity in the post-secondary system to meet learner and labour market demand.

1.12 Develop a framework that defines roles and mandates of the public and private not-for-profit post-secondary institutions.

1.13 Produce an annual report projecting learner demand (regional and program forecasts).

GOAL

1 *A Learner-Centred System Accessible to all Albertans*

Performance Measures	Last Actual (year)	Target 2007-08	Target 2008-09	Target 2009-10
1.a Public satisfaction that adult Albertans can access education or training	79% (2005-06)	76%	78%	80%
1.b Proportion of Albertans aged 18-34 participating in post-secondary education	18% (2006)	21%	22%	23%
1.c New apprentices registered (five year average)	13,886 (2005)	14,900	16,100	17,200
1.d Aboriginal Albertans participating in apprenticeship	1,137 (2005)	1,350	1,500	1,600
1.e Proportion of graduates who agree that the program they graduated from was worth the financial cost	83% (2005-06)	85%	n/a	85%
1.f Ratio of total debt at graduation to income two years after graduation	37% (2005-06)	36%	n/a	35%
1.g Scholarship dollars per full-time student studying in Alberta	$260 (2004-05)	$270	$280	$290

n/a Data available every other year.

A new measure is being developed for this goal that will be linked to the outcome: "All Albertans, including Aboriginal and other under-represented groups, have opportunities to participate in the advanced learning system." This measure, "Aboriginal Albertans participating at post-secondary institutions," will have targets set upon availability of additional data. The last actual for this measure was 6,386 (2004-05).

GOAL

2 *Vibrant and Sustainable Learning Communities and Partnerships*

What it means

By supporting vibrant and sustainable learning communities, Alberta Advanced Education and Technology supports learners from a variety of communities who aspire to participate in high quality, accessible and affordable advanced learning opportunities. This support enhances the opportunities for Albertans to develop and apply the knowledge and skills that will secure Alberta's ability to maximize its economic and human potential now and into the future. Advanced Education and Technology also continues to work collaboratively with partners and stakeholders to enhance quality learning opportunities for Albertans.

Outcomes

The following have been identified as Goal 2 outcomes:

- A broad array of learning opportunities is available within local communities.
- Employers, communities, learning providers and government establish effective partnerships.
- Albertans have the skills and aptitudes needed to participate in the economy and their communities.

Strategies

2.1 Provide opportunities in local communities for adults including Aboriginal, immigrant, youth, and other under-represented groups to access literacy, English as a Second Language and lifelong learning.

2.2 Redesign the community-based adult learning delivery system to ensure community programs are addressing literacy, English as a Second Language and other learning needs of adults.

2.3 Work with Employment, Immigration and Industry, to implement the *Building and Educating Tomorrow's Workforce* strategy.

2.4 Encourage increased industry participation and investment in the apprenticeship and industry training system in collaboration with the Alberta Apprenticeship and Industry Training Board, employers and other stakeholders.

2.5 Expand access for Aboriginal Albertans by building partnerships and capacity with providers of Aboriginal adult learning opportunities.

GOAL

3 *A Globally Recognized Quality Advanced Learning System*

What it means

Alberta will know that it has a quality advanced learning system when it is seen as a leader in advanced learning and its learning system is globally recognized for its excellence. Alberta will also know it has a quality advanced learning system when it is seen as a destination of choice for international students, faculty, and researchers. Ensuring that prior learning, skills, and experience are recognized and that credentials are transportable into, within and out of Alberta is important to allow this kind of global movement of learners to take place. It is also important to allow Alberta learners to move easily through a broad array of learning opportunities in a lifelong journey of learning.

Outcomes

The following have been identified as Goal 3 outcomes:

- Albertans are achieving advanced learning credentials.
- Albertans are participating in international learning experiences.
- Alberta is globally recognized as a destination of choice for international students, faculty and researchers.
- Credentials, prior learning, skills and experience are valued and recognized.

Strategies

3.1 Enhance the infrastructure of Alberta's public post-secondary system to facilitate delivery of high-quality advanced learning opportunities throughout the province.

3.2 Strengthen Alberta's leadership in cooperative pan-Canadian initiatives through the Council of Ministers of Education, Canada; Canadian apprenticeship councils; and other national forums.

3.3 Implement the international education action plan to facilitate the internationalization of Alberta's advanced learning system and enhance opportunities for Alberta students to engage in international education experiences.

3.4 Work with institutions, employers and professional associations to encourage the recognition of credentials, competencies, prior learning and work experience of current and prospective Albertans.

3.5 Through the Campus Alberta Quality Council, work with other quality assurance agencies, post-secondary institutions and other stakeholders to enhance the recognition of Alberta's degree programs and graduates.

GOAL

2 *Vibrant and Sustainable Learning Communities and Partnerships*

Performance Measures	Last Actual (year)	Target 2007-08	Target 2008-09	Target 2009-10
2.a High school to post-secondary transition rate (within six years of entering Grade 10)	57.5% (2004-05)	58%	59%	60%
2.b Public agreement that programs, classes or courses are offered in locations (including online) that are easily accessible	77% (2005-06)	78%	78%	78%
2.c Satisfaction of recent post-secondary graduates with the overall quality of their educational experience	90% (2005-06)	90%+	n/a	90%+
2.d Satisfaction of recent apprenticeship graduates with on-the-job training	91% (2004-05)	n/a	90%+	n/a
2.e Satisfaction of recent apprenticeship graduates with technical training	93% (2004-05)	n/a	90%+	n/a
2.f Employer satisfaction with the skills and quality of work of advanced education system graduates	94% (2005-06)	90%+	n/a	90%+
2.g Employment rate of recent Alberta advanced education graduates				
Post-secondary certificate or diploma	97% (2005-06)	95%+	n/a	95%+
University degree	97% (2005-06)	95%+	n/a	95%+
Journeyperson	97% (2004-05)	n/a	95%+	n/a

GOAL

3 *A Globally Recognized Quality Advanced Learning System*

Performance Measures	Last Actual (year)	Target 2007-08	Target 2008-09	Target 2009-10
3.a Educational attainment of Albertans aged 25 to 64				
Proportion having completed post-secondary education	58% (2006)	60%	62%	62%
3.b Educational attainment of Aboriginal Albertans aged 25 to 64				
Proportion having completed post-secondary education	43% (2006)	45%	45%	45%
3.c International visa students registered at Alberta post-secondary institutions	9,196 (2005-06)	9,300	9,400	9,500
3.d Percentage of post-secondary graduates with prior learning who reported that they had received the transfer credits they expected	91% (2005-06)	90%+	n/a	90%+

n/a Data available every other year.

GOAL
4 Build Research and Innovation Capacity in Key Areas

What it means

Strong research capacity and capability at Alberta universities, other research agencies, colleges and technical institutes is a critical building block supporting innovation. The Government of Alberta's commitment to scientific excellence will nurture, support, and celebrate creativity, discovery and outstanding research across its diversity. The focus on Alberta's key research areas—energy, life sciences, information and communications technology and nanotechnology—will ensure that critical mass and capacity is achieved. Investments in these priorities are guided by strategies developed by the ASRA (Alberta Science and Research Authority) research institutes. Through infrastructure programs and targeted program funding, Alberta's investments attract research funding from a range of sources, resulting in unique partnerships focused on building and sustaining the research capacity of Alberta's innovation system. This goal reflects the vital importance of developing, attracting and retaining high quality people who possess the scientific, technical and entrepreneurial skills needed in an innovative, knowledge-based, research-intensive economy.

Outcomes

The following have been identified as Goal 4 outcomes:

- World-class post-secondary institutions and research organizations that are recognized globally for academic and research performance.
- Focused areas of research excellence where Alberta has a competitive advantage.
- A highly skilled and qualified workforce that supports research and innovation.
- A collaborative, networked, and multidisciplinary research system that spurs innovation.

Strategies

4.1 Strengthen Alberta's strategic scientific innovation capacity in key areas by investing in leading-edge research infrastructure and programs to develop, attract and retain highly qualified scientific personnel at Alberta's public research organizations.

4.2 Work through programs such as the Alberta Science and Research Investments Program and the Small Equipment Grants Program, and work with the ASRA (Alberta Science and Research Authority) research institutes including iCORE Inc., Alberta Ingenuity, Alberta Research Council and the Alberta Heritage Foundation for Medical Research to align efforts and investments towards strategic research priorities.

4.3 Develop a framework to support the emergence of centres of excellence and ensure alignment of investments with institutional priorities and capacity.

4.4 Support advanced energy research and innovation in six core areas: bitumen upgrading, clean carbon/coal, improved recovery, renewable energy, CO_2 management and water management.

4.5 Support the implementation of the life sciences strategy focusing on bioproducts, health and resource management innovations.

4.6 Support the implementation of the Alberta Nanotechnology Strategy and the creation of nanoAlberta as the key organization to drive Alberta's nanotechnology agenda.

4.7 Implement the information and communications technology strategy and support an environment that fosters research and industry development in strategic areas: building a "Digital Alberta"; focusing on core competencies that support integrated resource management; enhancing research capacity in information and communications technology; and creating a sustainable infrastructure.

GOAL

4 *Build Research and Innovation Capacity in Key Areas*

Performance Measures	Last Actual 2005-06	Target 2007-08	Target 2008-09	Target 2009-10
4.a Total sponsored research revenue attracted by Alberta universities	$631.6M	$670M	$707M	$739M
4.b Total sponsored applied research revenue attracted by Alberta technical institutes and colleges	$6.7M	$6.7M	$6.7M	$6.7M
4.c Energy research: ratio of private and other public investments to Government of Alberta investments	1.71	2.0	2.0	2.0
4.d Life sciences research: ratio of private and other public investments to Government of Alberta investments	1.27	1.4	1.4	1.4
4.e Information and communications technology research: ratio of private and other public investments to Government of Alberta investments	1.94	1.7	1.7	1.7
4.f iCORE Awards (Totals include New)				
New Research Chairs, Industry Chairs and Professors	3	3	3	3
Total Active Research Chairs, Industry Chairs and Professors	24	24	24	24
New Graduate Student Scholarships	105	80	80	80
Total Active Graduate Student Scholarships	263	200	200	200
4.g Number of graduate students studying in Alberta	15,946 (2004-05)	16,200	16,600	16,900

GOAL

5 *Capturing Value through Innovation*

What it means

Innovation, excellence and competitiveness are the cornerstones of a vibrant economy and are the foundations for prosperity and the maximization of the human, social and economic potential of Alberta. Strategic investments in research and development result in innovative ideas, products and processes that, when commercialized successfully for the global market place, have the potential to yield significant economic and social benefits for the province.

This goal reflects the commitment to help Alberta become a place of choice for commercialization in the key areas of energy, life sciences, information and communications technology and nanotechnology. This requires Alberta to be a progressive province that encourages company formation and growth, offers a supportive and competitive tax, fiscal and regulatory environment, and effectively utilizes industry-university interfaces and other support services. In such an environment, ideas are more likely to be developed and brought to market in Alberta, supporting applied research and development, strengthening the commercialization system, and encouraging innovation.

Outcomes

The following have been identified as Goal 5 outcomes:

- Grow, attract and retain successful companies in Alberta's strategic priority sectors, through increased application and commercialization of research.
- Develop, attract and retain skilled and highly qualified people.
- Increased business research and development.
- Applied research and product development in our colleges and technical institutes that addresses local company needs.
- Growth in Alberta's locally managed venture capital industry.
- Increase implementation of innovative initiatives to enhance Government of Alberta service delivery and facilitate the application of new knowledge.
- Development of partnerships between communities, industry and institutions for technology creation and transfer.

Strategies

5.1 Work with partners to support the implementation of strategies to accelerate innovation in Alberta through investments in strategic priority areas.

5.2 Work with post-secondary institutions, research foundations, industry associations and other areas of government to enhance the competitiveness of Alberta's business environment with respect to encouraging technology commercialization and adoption.

5.3 Work with partners to foster business opportunities, attract corporate investments and encourage seed and venture funding.

5.4 Develop, attract and retain skilled and highly qualified people in Alberta.

5.5 Encourage and support innovative activities within the Government of Alberta.

GOAL
5 *Capturing Value through Innovation*

Performance Measures	Last Actual (year)	Target 2007-08	Target 2008-09	Target 2009-10
5.a Percentage of Government of Alberta expense used to support innovation	1.6% (2004-05)		Increase above prior year*	
5.b Number of Albertans employed in knowledge-intensive (high-tech) companies	122,900 (2005)	132,000	136,000	140,000
5.c Albertans employed in knowledge-intensive companies as a percentage of Albertans employed in all companies	6.9% (2005)	7.1%	7.2%	7.3%
5.d Percentage of Canadian venture capital invested in Alberta's strategic priority areas	2.9% (2005)	3.2%	3.3%	3.4%
5.e Alberta business expenditures on research and development	$782M (2003)	$854M	$890M	$926M

* The long-term target for measure 5.a is 5% by 2015.

Organizational Structure supporting our Business Plan

Advanced Education and Technology has identified two core businesses: ***A Learning Alberta*** and ***Innovation***.

A Learning Alberta Core Business - Program Divisions

The core business of A Learning Alberta features two program divisions: ***Adult Learning*** and ***Apprenticeship and Industry Training***. These program divisions provide learning services and standards for the advanced learning system, and provide a framework for achieving results and allocating resources. These divisions work closely with advanced learning system stakeholders and provincial ministry partners to ensure program continuity and smooth transitions for learners.

Adult Learning

The Adult Learning Division works with adult learners and the public and private post-secondary institutions to support learners, provide learning opportunities and enhance the advanced learning system. Specifically, the Division funds advanced learning providers; provides student financial assistance to Albertans; coordinates and approves programs of study at public institutions; licenses and approves programs offered by private providers; and funds, supports and provides community adult learning opportunities.

Apprenticeship and Industry Training

The Apprenticeship and Industry Training Division works with industry, employer and employee organizations, technical training providers, government and ministry divisions to support the development, maintenance and delivery of designated trade and occupation programs. Specifically, the Division provides planning, coordination and policy support to the Alberta Apprenticeship and Industry Training Board and its network of industry committees; facilitates industry's development of training and certification standards; counsels apprentices and employers; provides funding for approved programs; promotes participation and certifies individuals in designated trades and occupations; and monitors the workplace for compliance with the *Apprenticeship and Industry Training Act* and regulations.

Innovation Core Business - Program Divisions

The core business of innovation focuses on implementing the province's innovation agenda. Ministry efforts are focused on increasing commercialization and adoption of research thereby encouraging industry growth; encouraging and supporting innovation within the Government of Alberta; building the capability and capacity of the innovation system; and building research and innovation excellence in the strategic priority areas of energy, life sciences, information and communications technology and nanotechnology. The two divisions of the Innovation core business are ***Research*** and ***Technology Commercialization***.

Research

The Research Division works with the Alberta Science and Research Authority and its affiliated research institutes for Life Sciences, Energy, Information and Communications Technology, Agriculture and Forestry to coordinate, support and promote research, development and innovation in the strategic priority sectors of energy, life sciences (e.g. agriculture, forestry, health, water), information and communications technology and nanotechnology. The University Research and Strategic Investments Branch administers the Alberta Science and Research Investments Program, facilitating alignment with the Research Institutes' initiatives where appropriate. The branch also administers the government's Innovation Program.

Technology Commercialization

The Technology Commercialization Division supports the creation and establishment of new technology companies in key emerging industries by focusing on four areas of activity: technology development services; business development services; access to capital; and international partnerships and investment attraction. The Division also provides the department with information management and technology services.

Supporting Functions

Policy and Planning

The Policy and Planning Division ensures the Ministry and its activities and programs are well planned and accountable for performance. System issues are defined and understood through comprehensive environmental scanning, analysis and information collection processes. Policy options are identified and information, policies and planning directions are communicated to help the Ministry achieve its goals. The Division also provides department-wide legislative services.

Finance and Administration

Finance and Administration provides strategic advice and services to the Ministry in areas such as financial planning, reporting and operations. The goal of Finance and Administration is to ensure the effectiveness and efficiency of financial management, accountability and administration functions within the Ministry.

Communications

Communications provides timely, strategic communications support and advice (planning, consulting and technical guidance) to the Minister and the department on key issues, policies, and initiatives. Communications works closely with other provincial departments and other levels of government, media, stakeholders, educational institutions and others to inform Albertans about the importance of advanced learning and innovation.

Human Resources

Human Resources provides consultation and support, and advises the department on all activities related to the management of its human resources such as policy and planning; staffing; performance management; job classification and organization design; employee relations; staff development; occupational health and safety; wellness; and pay and benefits.

Advisory Boards, Councils and Authorities

Access Advisory Council

The Access Advisory Council provides strategic advice and recommendations to the Minister of Advanced Education and Technology regarding the objectives, operation and reporting of the Access to the Future Fund. The Council consists of nine public members, including a chair, who are appointed by the Minister.

Alberta Apprenticeship and Industry Training Board

The Alberta Apprenticeship and Industry Training Board works with industry to establish the standards and requirements for training and certification in programs under the *Apprenticeship and Industry Training Act*. The Board makes recommendations to the Minister of Advanced Education and Technology about the needs of Alberta's labour market for skilled and trained workers and the designation of trades and occupations. The Board establishes or recognizes trade and occupation-specific industry committees and appoints members to these committees, and promotes participation in careers, training and certification in trades and occupations. The Board consists of 13 members, appointed by the Lieutenant Governor in Council, who are knowledgeable about training in trades and occupations and the needs of the Alberta labour market. Employers and employees are represented in equal numbers. Eight of the members represent employers and employees in designated trades and four represent employers and employees in other industries.

Alberta Council on Admissions and Transfer

The Alberta Council on Admissions and Transfer is a 15-member Council, with representation from the public, students, the universities, public colleges and technical institutions, private colleges and Alberta Education. As an independent body, which reports annually to the Minister of Advanced Education and Technology, it is responsible for developing policies, guidelines and procedures designed to facilitate transfer agreements among post-secondary institutions. The framework for these admissions and transfer agreements is contained in the Council's principles, policies and procedures, published in the *Alberta Transfer Guide*.

Campus Alberta Quality Council

In Spring 2004, the *Post-secondary Learning Act* was proclaimed into law, which provides for the establishment of the Campus Alberta Quality Council. The Campus Alberta Quality Council is an 11-member Council that provides advice to the Minister of Advanced Education and Technology with respect to the quality of all proposed degree programs at both public and private institutions. It is also responsible for monitoring the programs once approved to ensure that the Council's conditions and quality standards continue to be met.

Students Finance Board

The Students Finance Board is an 11-member Board appointed by the Minister of Advanced Education and Technology. The members of the Board serve three-year terms, and may serve no more than two terms. The Board provides advice to the Minister on matters pertaining to student financial assistance, including scholarships under the *Alberta Heritage Scholarship Act*.

Alberta Science and Research Authority

Alberta Science and Research Authority is a provincial corporation comprising members of Alberta's academic, business and research communities, appointed by government. The authority's mission is to enhance the contribution of science and research to the sustainable prosperity and quality of life of all Albertans. In order to fulfill this mission, the authority functions as the senior science and research advisory body to the Government of Alberta. The authority includes:

- ***Alberta Life Sciences Institute*** is an unincorporated board comprising representatives from industry, academia and government. It provides strategic direction, sets priorities for research and monitors performance on the expansion of the province's bio-economy.
- ***Alberta Agricultural Research Institute*** is an unincorporated board comprising representatives from industry, academia and government. It provides strategic direction in agricultural production and value-added products research and development and coordinates investment in agricultural research and development for the province.
- ***Alberta Forestry Research Institute*** is an unincorporated board comprising representatives from industry, academia and government. It provides strategic direction for, and encourages and supports private and public investment in, the economic, environmental, ecological and community sustainability of Alberta's forestry sector.
- ***Alberta Energy Research Institute*** is an unincorporated board comprising representatives from industry, academia and government. It provides strategic direction to position Alberta for the future in energy development and invests in research and technology to enhance sustainable development of the province's abundant energy resources.
- ***Alberta Information and Communications Technology Institute*** is an unincorporated board comprising representatives from industry, academia and government that provides strategic advice and policy recommendations to government, and sets priorities for research. It will expand and update the province's existing information and communications technology research and innovation strategy and provide direction for public investment in research and development activities throughout the province.

Entities including Funds

Access to the Future Fund

The Access to the Future Fund supports innovation and excellence within the advanced education system in order to enhance and expand accessible, affordable and high quality learning opportunities. The Fund receives income from an endowment held within the Alberta Heritage Savings Trust Fund. Established in 2005, the endowment is targeted to reach $3 billion at full implementation.

Alberta Research Council Inc.

Alberta Research Council is a not-for-profit corporation owned by the Government of Alberta, through the Ministry of Advanced Education and Technology. A board of directors that includes representatives from the business and research communities in Alberta governs the council. The council delivers innovative science and technology solutions to meet the priorities of industry and government in Alberta and beyond. Integrated multi-disciplinary teams help customers and partners take technologies from the laboratory to the field, strengthening their competitiveness and sustainability. The council accelerates the development and commercialization of products, processes and services in the energy, life sciences, agriculture, environment, forestry and manufacturing sectors.

iCORE Inc. (Informatics Circle of Research Excellence)

iCORE is a not-for-profit corporation owned by the Government of Alberta through the Ministry of Advanced Education and Technology. A board of directors that includes representatives from the business and research communities in Alberta governs the corporation. iCORE Inc. is part of the strategy to develop the innovation-based economy of the province by attracting world-class information and communications technology researchers and graduate students to Alberta. iCORE Inc. invests in people—the highest calibre research scientists capable of working on fundamental and applied problems in informatics. Access to research expertise and high quality students provides Alberta's traditional and emerging industry sectors with the knowledge and human resources needed to compete in the global economy.

Alberta Heritage Foundation for Medical Research

Established by the Government of Alberta in 1980, the Alberta Heritage Foundation for Medical Research supports biomedical and health research at Alberta universities, affiliated institutions and other medical and technology-related institutions. The foundation is an independent body at arms-length from, but accountable to, the government, reporting through the Minister of Advanced Education and Technology.

The foundation currently provides funding for over 600 researchers and researchers-in-training. The foundation's commitment is to fund health research based on international standards of excellence carried out by new and established investigators and researchers-in-training. Total funding awarded since 1980 is in excess of $850 million.

Alberta Ingenuity
(Alberta Heritage Foundation for Science and Engineering Research)

Alberta Ingenuity is the trade name of the Alberta Heritage Foundation for Science and Engineering Research and was established by the Government of Alberta in 2000. It supports a balanced, long-term program of science and engineering research based in Alberta to nurture the discovery of new knowledge and encourage its application to benefit Albertans. Alberta Ingenuity is an independent body at arms-length from, but accountable to, the government, reporting through the Minister of Advanced Education and Technology.

Expense by Core Business

(thousands of dollars)	Comparable 2005-06 Actual	2006-07 Budget	2006-07 Forecast	2007-08 Estimate	2008-09 Target	2009-10 Target
A Learning Alberta	1,827,039	2,202,476	2,331,733	2,863,270	2,844,981	2,592,188
Innovation	196,742	181,373	200,782	230,775	189,536	167,496
Ministry Expense	2,023,781	2,383,849	2,532,515	3,094,045	3,034,517	2,759,684

Ministry Statement of Operations

(thousands of dollars)	Comparable 2005-06 Actual	2006-07 Budget	2006-07 Forecast	2007-08 Estimate	2008-09 Target	2009-10 Target
Revenue						
Internal Government Transfers	131,338	163,159	168,969	176,001	176,686	178,033
Transfers from Government of Canada	214,304	254,147	230,851	383,306	465,962	461,956
Investment Income	6,356	8,500	10,220	10,650	12,550	14,650
Premiums, Fees and Licences	4,613	5,209	6,709	8,160	9,160	10,160
Other Revenue	42,169	44,984	42,564	45,061	45,013	45,013
Ministry Revenue	398,780	475,999	459,313	623,178	709,371	709,812
Expense						
Program						
Support for Adult Learning	1,471,077	1,626,156	1,690,513	1,807,363	1,930,737	2,068,432
Support to Post-Secondary Learners	129,213	187,715	144,501	189,258	189,499	184,098
Post-Secondary Facilities Infrastructure	185,000	277,143	395,443	743,329	606,457	220,874
Apprenticeship Delivery	23,203	27,129	28,629	30,746	32,221	31,611
Alberta Centennial Education Savings Plan	2,801	19,500	8,175	19,500	19,500	19,500
Research and Innovation Capacity	76,090	83,638	107,086	132,502	90,799	68,525
Technology Commercialization	42,905	12,889	12,889	12,962	13,035	13,108
Policy and Planning	5,483	6,428	5,666	6,246	6,364	6,477
Ministry Support Services	13,822	18,357	18,668	19,179	18,437	18,546
Access to the Future Fund	—	45,000	45,000	52,729	46,721	47,649
Alberta Research Council Inc.	61,439	68,451	65,102	68,768	69,464	70,161
iCORE Inc. (Informatics Circle of Research Excellence)	12,412	11,438	10,838	11,458	11,278	10,698
Valuation Adjustment	336	5	5	5	5	5
Ministry Expense	2,023,781	2,383,849	2,532,515	3,094,045	3,034,517	2,759,684
Gain (Loss) on Disposal and Write Down of Capital Assets	(35)	—	22	—	—	—
Net Operating Result	(1,625,036)	(1,907,850)	(2,073,180)	(2,470,867)	(2,325,146)	(2,049,872)

Consolidated Net Operating Result

(thousands of dollars)	Comparable 2005-06 Actual	2006-07 Budget	2006-07 Forecast	2007-08 Estimate	2008-09 Target	2009-10 Target
Ministry Revenue	398,780	475,999	459,313	623,178	709,371	709,812
Inter-ministry consolidation adjustments	(133,392)	(165,159)	(171,119)	(178,001)	(178,686)	(180,033)
Consolidated Revenue	265,388	310,840	288,194	445,177	530,685	529,779
Ministry Expense	2,023,781	2,383,849	2,532,515	3,094,045	3,034,517	2,759,684
Inter-ministry consolidation adjustments	(2,054)	(2,000)	(2,150)	(2,000)	(2,000)	(2,000)
Consolidated Expense	2,021,727	2,381,849	2,530,365	3,092,045	3,032,517	2,757,684
Gain (Loss) on Disposal and Write Down of Capital Assets	(35)	—	22	—	—	—
Consolidated Net Operating Result	(1,756,374)	(2,071,009)	(2,242,149)	(2,646,868)	(2,501,832)	(2,227,905)

Websites

Government of Alberta	www.gov.ab.ca
Advanced Education and Technology	www.advancededucation.gov.ab.ca www.innovation.gov.ab.ca
Access Advisory Council / Access to the Future Fund	n/a
Alberta Apprenticeship and Industry Training Board	www.tradesecrets.gov.ab.ca
Alberta Council on Admissions and Transfer	www.acat.gov.ab.ca
Alberta Heritage Foundation for Medical Research	www.ahfmr.ab.ca
Alberta Ingenuity	www.albertaingenuity.ca
Alberta Research Council	www.arc.ab.ca
Alberta Science and Research Authority	www.asra.gov.ab.ca
Campus Alberta Quality Council	www.caqc.gov.ab.ca
iCORE (Informatics Circle of Research Excellence)	www.icore.ca
Students Finance Board	www.alis.gov.ab.ca/studentsfinance

Publicly Funded Post-Secondary Institutions

Main Campuses

College
Technical Institute
University
The Banff Centre
Private University College